

EPU 40

EPU 40 is a high performance polyurethane elastomer that is a good choice for applications where high elasticity and tear resistance are needed.

CarbonResin EPU 40

DOC #103208 REV E
TECHNICAL DATA SHEET, LAST UPDATED 08/15/2018

| Tensile Properties ASTM D412, Die-C Shape, 500 mm/min | Metric | U.S. |
|---|---------|----------|
| Ultimate Tensile Strength | 7.7 MPa | 1100 psi |
| Elongation at Break | > 250 % | |
| Stress at 50 % Elongation | 1.9 MPa | 280 psi |
| Stress at 100 % Elongation | 3.0 MPa | 440 psi |
| Stress at 200 % Elongation | 5.5 MPa | 800 psi |

| Mechanical Properties | Metric | U.S. |
|---|---------|-------------------------|
| Tear Strength, ASTM D624, Die-C (die cut) | 23 kN/m | 130 lb _f /in |
| Compression Set, 23 °C, 72 hrs, ASTM D395-B | 23 % | |
| Bayshore Rebound Resilience, ASTM D2632 | 29 % | |

| Thermal Properties | Metric | U.S. |
|--|--------|-------|
| T _g (DMA, tan(d)), ASTM D4065 | 8 °C | 46 °F |

| Dielectric Properties ASTM D150, 1 MHz | Metric | |
|--|--------|--|
| Dissipation Factor | 0.031 | |
| Dielectric Constant | 3.9 | |

| General Properties | Metric | |
|---|--------------------------|--|
| Hardness, Shore A, ASTM D2240 | 68 (instant), 64 (5 sec) | |
| Density, ASTM D792 | 1.025 g/cm ³ | |
| Density (liquid resin) | 1.00 g/cm ³ | |
| Relative Abrasion Volume Loss, ISO 4649 A | 170 mm ³ | |

NOTES—Results in this data sheet represent typical values from specific sample generation and testing processes and may vary if the established protocols are not followed. Contact Carbon for the specific process used to generate the test samples to determine each of these values. The U.S. values are converted from Metric measurements and are for reference only.

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